

**COUNTY OF FAUQUIER
OFFICE OF THE COUNTY ADMINISTRATOR**

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To: Board of Supervisors
From: Ron Mabry
Re: Northern Sports Field Complex – Support Material: Scope of Work, Engineering Design Services
CC:

The material below represents the Scope of Work published in the RFP for Engineering Design Services at the Northern Sports Field Complex. This material is presented as support material for the Request for Contract Award and Resolution.

STATEMENT OF NEEDS/REQUIREMENTS

The selected Firm shall be able to provide Owner with full professional A/E services for the design, pre-contract documents to include printing and delivery to Procurement Division project manual, issuing any addenda to clarify bid documents, attendance at pre-construction conference, assistance to County in evaluating bids, securing all approvals required for construction of project and construction administration. All services shall be in accordance with the County Code, the latest edition of the BOCA, Virginia Uniform Statewide Building Code (VUSC) and the American with Disabilities (ADA). Architectural and Engineering services will include the following design philosophy guidelines:

- Maintain as closely as possible the character of the existing property as well as that of Northern Fauquier
- Focus on youth sports while serving all ages
- Promote community
- Compliment Marshall Community Center
- Stress high quality development and maintenance

- Architectural style to reflect agricultural designs of the area and the farming history of the site
- Design Firm will need to successfully work with a variety of organizations to accomplish the goals of the project.
- Design-not-to-exceed-cost – preliminary estimated construction budget for project is \$8,500,000 plus \$1,000,000 for contingency excluding swimming pool. Pool design to be bid as an option based on \$1.5 million to \$2.5 million. The selected Firm's Contract requires that if the low bid exceeds the "Design-not-to-exceed" cost identified in the Firm's Contract by more than 10%, any of the Firm's revisions to the plans and specifications required to bring the cost of the project within the "Design-not-to-exceed" cost may be executed by the Firm at no additional cost to the Owner.

The selected Firm shall include in their scope submittal:

- A proposed agreement to include a schedule of deliverables that will be required as part of the agreement
- Details of each element of work to be performed, the subcontractor or person who will be performing this work and their expertise in this field.
- Provisions for replacement of any contractor that fall behind the schedule and/or termination of the entire contract if it falls behind schedule.
- Review of the conceptual plan for changes requested by the Owner.
- Timeline for completion of work with scheduled, periodic submittals and payment schedule.
- Inclusion of outdoor pool into overall scope of work
- Monthly meeting with appropriate subcontractors and lead Firm representative with County Planning staff to review and to coordinate planning
- Complete design for turnkey operation
- Review of all aspects of the conceptual plan especially demands on water and sewer and investigation of inclusion of emergency access/egress
- Permitting and studies needed to complete design and initiate construction to be included within scope of work. Each element of these permits and studies shall be identified specifically in the response to this proposal or indicated as a potential element to be determined later.
- Owner to provide front end bid documents, Firm to provide technical specifications and plans
- Design to be completed at 1"=50' scale and submitted in hard copy (5 copies of each set of plans) and on the latest version of AutoCAD on CD.

The selected Firm may be requested to provide the following additional services:

- Attendance at monthly coordination meeting to review status of project and specific issues.
- A minimum of six (6) meetings with the Ad Hoc Committee is required.
- A minimum of six (6) presentations and/or meetings with the Board of Supervisors is required.
- Color schematics for presentations to the Owner of the site and major facilities
- Development of maintenance program and annual costs to implement
- Conceptual plan is undergoing final review and may be revised prior to award of contract and may also be revised during design.

5. SCOPE OF SERVICES

5.1 General Scope:

5.1.1 Work will consist of several tasks to include engineering, design, preparation of contract drawings and specifications, cost estimates, "as built" drawings, review of contractor submittals and inspection of construction. The work includes design of all civil, structural, architectural, mechanical and electrical systems for a complete sports complex.

5.2 Construction Cost: Monitor the estimated construction costs at all times during design to ensure the project provides a complete and usable facility within the construction budget, including a 10% construction contingency. Should the A/E Firm at any time determine that the project as designed exceeds the construction budget, the Firm shall notify the Owner at once and provide recommended design alternatives that could be used to keep the project within budget. If the Owner determines that the Firm has overdesigned for the funds available, the Firm shall redesign as required to provide a facility within the budgeted funds at no additional cost to the Owner.

5.3 Permits: Prepare all forms, sketches, drawings and supporting documentation necessary for the permitting by the Owner. The architect will deliver and pay all fees for site review, erosion control and preliminary construction plan review.

5.4 Submittal format requirements:

5.4.1 Written documents including cost estimates, specs, design calculations and reports shall be bound. The submittal title, project name, contract number and date shall appear on or be visible through the cover. Divide each volume into logical sections: include an opening summary or overview.

5.4.2 Delivery: Deliver submittals by overnight mail or in person.

5.4.3 Contract Specifications: Type specs on 8 ½" x 11" paper with 1" side margins and ½ inch top and bottom margins. On each page type Project Specifications Northern Fauquier County Sports Complex and Community Park.

5.4.5 Design Calculations: Prepare on 8 ½" x 11" paper. Calculations shall be detailed and broken down into all major structural, mechanical and electrical components

of the project. Reference the various sections of codes and standards used where applicable throughout the calculations. Identify design criteria and equipment performance parameters in the calculations.

5.5 DESIGN PHASE

5.5.1 Site Survey Task: Visit site and become fully informed of conditions affecting the site. Obtain sufficient information to permit the complete design of the project with a minimum of return visits. Submit a site survey report to the Owner summarizing the information collected.

5.5.2 Site Plan Submission: Site plan approval is given by the Owner. Four (4) copies of a fully engineered site plan (100%) must be submitted for review and approval by the Owner prior issuance of a building permit. Four (4) signature sets of the site plan shall be required upon approval. An as-built site plan drawing is required and must be approved by the Owner prior to issuance of occupancy permit. Preparation of the necessary drawings and documentation is included as part of this task. The Firm is responsible for determining all Owner site development requirements, attending all coordination/issues meetings with the Owner and furnishing a complete site development plan to ensure that the site plan approval does not impact the construction schedule of the project. The applicant for all Owner submissions will be submitted by either the civil engineer or the architect.

5.5.2.1 Grading Permit: Once the site plan has been approved, prepare and submit the Grading Permit application. The grading permit plans shall completely illustrate all erosion and sediment control for the site during construction process.

5.5.3 Design development Task: After receipt of the review comments from the design drawings, proceed with the development of the selected scheme into construction drawings and specifications. The submittal shall include the following:

5.5.3.1 Construction Drawings complete to the 35% stage overall, with no individual discipline less than 25% complete.

5.5.3.2 Building Plans

5.5.4 Revised Design Development Task Submittal: Submit a "Revised Design Development Task Submittal" within 14 calendar days after receipt of review comments from Owner. Submit three (3) copies of the revised drawings.

5.5.5 Construction Documents Task: This task consists of developing the selected scheme into completed construction drawings and specs. Owner reviews are included in this task at the 60, 95 and final 100% stages. The Owner reviews required six (6) sets of the submission package. Review comments in the form of marked up drawings and specifications and written comments, will be returned to the Firm, who shall incorporate the comments into the construction documents. After incorporation of all review comments into the construction documents, deliver six (6) sets of the final plans and specifications to the Owner.

5.5.5.1 60 % Submittal: Deliver the 60 % Submittal to the Owner. Review comments will be returned to the Firm, who shall incorporate the comments into the 95 % Submittal. The submittal shall include:

- 5.5.5.2 Construction drawings complete to the 60 % stage overall but with no individual discipline less than 50 % complete
- 5.5.5.3 95% Submittal: Deliver the 95% Submittal to the Owner. Review comments will be returned to the Firm, who shall incorporate the comments into the final 100% submission. The submittal shall include:
 - 5.5.5.3.1 Construction drawings 100% complete, detailed reviewed.
 - 5.5.5.3.2 Specifications – complete, typed and including the list of submittals and the list of operation and maintenance manuals.
 - 5.5.5.3.3 Cost estimates based on quantity take offs and unit material and labor prices. The estimate shall be complete in every respect including overhead, profit mobilization and demobilization cost and quotations to support major cost items. Design contingencies shall not be used at this stage.
 - 5.5.5.3.4 Design calculations, including manufactures' model numbers, performance curves, etc.
 - 5.5.5.3.5 Separate listings that identify long lead time items and items which, because of their uniqueness, importance, or lack of tolerance in manufacture or installation, require particular scrutiny during construction; and proprietary items.
- 5.5.5.4 100% Submittal: Submit 100% drawings and specification to Owner for review. After approval, submit original drawings, sealed and signed on all sheets by a legally responsible officer of the Firm and the original bound copy specifications to the Owner. Retain one set of reproducibles for filing. The submittal shall include:
 - 5.5.5.4.1 Complete construction drawings.
 - 5.5.5.4.2 Complete construction specifications.
 - 5.5.5.4.3 Cost estimate and design calculations revised according to the 95% submittal review comments

5.6 CONSTRUCTION BIDDING PHASE

- 5.6.1 Provide drawings and specifications for prospective bidders.
- 5.6.2 Be responsible for answering questions from bidders. All correspondence shall be documented and forwarded to Director of Procurement.
- 5.6.3 Attend pre-bid conference. Present a brief overview of the project and prepare responses to questions from bidders.
- 5.6.4 Assist with evaluation of potential bidders.

- 5.6.5 Assist Owner in preparation of addendum to the construction documents.

5.7 CONSTRUCTION PHASE

- 5.7.1 Be responsible for preparing final construction document package which incorporates all issued addendum. Provide one set of reproducibles of specifications and contract drawings. Provide three (3) sets of half-size drawings.
- 5.7.2 Review and recommend approval or disapproval of all construction contractor pay requests, requests for information and requests for change orders.
- 5.7.3 Review and recommend approval or disapproval of all construction contractor submittals including catalog cuts, shop drawings, material samples, manufacturer's certifications, and contractor's construction bid cost breakdown. Copies of catalog cuts, shop drawings, material samples and manufacturer's certifications shall be marked-up, stamped and required to Owner. Submittal reviews shall be completed and returned to Owner within 14 calendar days after receipt from Owner. Deliver submittal reviews by overnight mail or hand deliver. Retain one copy of all approved submittals and a log of all submittals until construction is complete, at which time return all copies to Owner. Each submittal copy and Material Approval Request form shall be signed and sealed by registered professional engineer or architect and shall be completed in regard to compliance with the drawings.
- 5.7.4 Submittal complies: Submittals: Stamp "APPROVED"
- 5.7.5 Submittal complies, but with clarification or minor change (no resubmittal required): Submittals: Stamp "APPROVED AS NOTED" and note clarification or change that is required for compliance.
- 5.7.6 Material Approval Request Forms: Check "SEE REVERSE" block and type on back of form the clarification or change that is required for compliance.
- 5.7.7 Submittal does not comply (requires resubmittal and review): Submittals: Stamp "DISAPPROVED – RESUBMIT" and note reason for disapproval.
- 5.7.8 Material Approval Request Forms: Check "DISAPPROVED" and "SEE REVERSE" blocks on back of form "DISAPPROVED- RESUBMIT" and the reason for disapproval.
- 5.7.9 Attend bi-weekly progress meetings to be held at the site. Submit a report summarizing construction progress, observations, deficiencies or other issues that may require further discussion. Periodic site visits by the major system designers or at critical intervals included in this task.
- 5.7.10 Provide punch list inspections for each phase of construction.

5.8 POST CONSTRUCTION PHASE

- 5.8.1 Conduct thorough punchlist inspections and prepare written punchlist incorporating those items complied by Owner. This task includes inspection

conducted prior to expiration of the warranty period. Inspection by each of the design disciplines is included in the task.

- 5.8.2 Prepare record "as-built" drawings based on marked-up prints, drawings and other data furnished by the General Contractor. Submit final record drawings within 30 calendar days after receipt of marked-up drawings from General Contractor. All final revisions shall be on the signed mylar reproductions. The final "as-built" drawings shall show the actual construction only, except where the originals contain portions of the drawings marked "N.I.C." (not in contract) or when optional methods of construction are shown. Deletions or superseded portions of the drawings, or original methods of construction shall not be used, shall be crossed out and noted "NOT BUILT". No change need be made to those portions, and symbols shall be removed from the body of the drawings. The revision notation in the revision block shall remain. Where a drawing is modified to show "as built" conditions, the notation "RECORD DRAWING" shall be entered on the top most available line in the revision block.

5.9 ADDITIONAL ARCHITECTURAL/ENGINEERING SERVICES

- 5.9.1 If required by the Owner, provide additional architectural-engineering services at the hourly rates as negotiated. In addition, the Owner will pay the Firm's actual cost for travel, plus the cost of subsistence and lodging not to exceed the current "per diem" rate of the Owner. Such services shall be provided at the construction site or at the Owner's office. These services do not include answers to telephone request for interpretation of plans and specifications which can be furnished without a detailed study, nor do they include correction of design deficiencies and specification ambiguities which shall be considered the Firm's mistakes and correctable at his expense. For the purposes of this contract, items such as fax transmissions, long distance phone calls, mailing services, courier services, materials required in preparation of presentations and other expenses deemed typical in the conduct of business will not be billed as a reimbursable expense.